Fenoprofen Calcium hydrate

Cat. No.: HY-B0288B

CAS No.: 71720-56-4

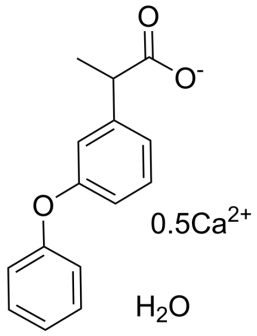
Molecular Formula: $C_{15}H_{15}Ca_{0.5}O_4$

Molecular Weight: 279.32

Target: COX; Apoptosis

Pathway: Immunology/Inflammation; Apoptosis

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (358.01 mM)
H_2O : 1 mg/mL (3.58 mM; Need ultrasonic)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Concentration / Solvent / Mass	1 mg	5 mg	10 mg
	1 mM	3.5801 mL	17.9006 mL	35.8012 mL
	5 mM	0.7160 mL	3.5801 mL	7.1602 mL
	10 mM	0.3580 mL	1.7901 mL	3.5801 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (8.95 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.95 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fenoprofen Calcium hydrate is a nonsteroidal, anti-inflammatory antiarthritic agent.Target: Prostaglandin G/H synthase 1Fenoprofen is a non-steroidal anti-inflammatory, antipyretic, analgesic agent advocated for use in rheumatoid arthritis, degenerative joint disease, ankylosing spondylitis and gout. Fenoprofen has a serum half-life of about 150 to 180 minutes and is at least 99% bound to plasma proteins. It is extensively metabolised after oral administration, the main metabolites being fenoprofen glucuronide and 4-hydroxy-fenoprofen glucuronide [1]. Fenoprofen calcium is revealed for relief of mild to moderate pain in adults and for relief of the signs and symptoms of rheumatoid arthritis and osteoarthritis. In patients with osteoarthritis, the anti-inflammatory and analgesic effects of fenoprofen calcium have been demonstrated by decrease in

	tenderness as a response to pressure and reduction in night pain, stiffness, swelling, and overall disease activity. These effects have also been demonstrated by attenuation of pain with motion and at rest and increased range of motion in involved joints [2].
IC_{50} & Target	COX

REFERENCES

[1]. Takashima-Hirano M, et al. General method for the (11)C-labeling of 2-arylpropionic acids and their esters: construction of a PET tracer library for a study of biological events involved in COXs expression. Chemistry. 2010 Apr 12;16(14):4250-8.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA